

High p_T Spectra from STAR

J.C.Dunlop^a for the STAR Collaboration

^a*Yale University, USA*

Presented by: J.C.Dunlop

Abstract

The energy loss of high energy partons propagating through matter has been proposed as a direct probe of the energy density of the matter. At RHIC, high transverse momentum hadrons resulting from jet fragmentation are produced at high rate and can be used as a detailed probe of the colliding system. We present first results from STAR on the high p_T distributions of charged hadrons well into the perturbative regime, in central and minimum bias $Au + Au$ collisions at $\sqrt{s_{NN}}=130$ GeV. Identified particle ratios at high p_T and high p_T charged hadron yields relative to the event plane provide more sensitive probes of the energy loss mechanism. We present first results from STAR on the p_T dependence of the ratios of π^+/π^- and K^+/K^- and charged hadron flow at high p_T .
